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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,210	03/02/2001	Peter Wolf	4100-0122P	2923
2292	7590	09/08/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			WILSON, ROBERT W	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/762,210

Applicant(s)

WOLF ET AL.

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/5/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1.0 The application of Peter Wolf for a "METHOD FOR DISPLAYING THE MODULATION ERROR OF A MULTIPLE CARRIER SIGNAL" filed 3/2/01 and claiming foreign priority based upon the following application: GERMANY 198 49 319.3 dated 10/26/1998 was examined. Claims 1-4 are pending.

#### *Claim Rejections - 35 USC § 112*

2.0 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected relative to 112/2<sup>nd</sup> paragraph because the metes and bounds of the claims cannot be assessed.

Referring to Claim 1-4, It is not clear from the claim limitations whether the functions performed as a part of the process for displaying are tangibly embodied in a processor or if the functions are being performed by a person who looks up values on graphs and then utilizes a calculator to calculate and to display results. What is meant by a "process for displaying"?

Referring to Claim 4, Pg 4 line 15, The wording "and/or" is indefinite. What is meant by "and/or"? Does the applicant mean "and" or does the applicant mean "or"?

Referring to Claim 4, Pg 4 lines 15-22, It is not clear from the claim limitations whether the functions performed as a part of the process for displaying are tangibly embodied in a processor or if the functions are being performed by a person who looks up values on graphs and then utilizes a calculator to calculate and to display results. What is meant by "MER subscript MAX are converted prior to their frequency-dependent graphic illustration into the unit dB in accordance with the equation ..."?

#### *Claim Rejections - 35 USC § 101*

3.0 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to Claims 1-4, the process for displaying does not necessarily imply that the functions or calculations described in the claim limitations are being performed in a processor or in other words tangibly embodied in hardware or software. The calculations or functions described in the claim limitations could be performed on a calculator and displayed on a calculator wherein a person looks up values on the graphs described in the process prior to the process of displaying.

For example in claim 1, Pg 2 lines 15-17, What is meant by, “d) this MER subscript RMS value is then illustrated on a graph for each individual carrier  $k$  as ordinate value of a diagram with the number of carriers as abscissa. Is the graph stored in a table on a computer readable medium or is the graph stored on paper in which a person looks up the values and then performs the calculations on a calculator?

For example in claim 2, Pg 3 lines 7-10, What is meant by “f) this MER-max value is then illustrated on a graph for each ....abscissa”. Is the graph stored in a table on a computer readable medium or is the graph stored on paper in which a person looks up the values and then performs the calculations on a calculator?

### ***Claim Objections***

4.0 Claims 1-4 are objected to because of the following informalities:

5.0 The subscripts in the equations referred to in claims 1-4 appear to have a typing error because the equations refer to a subscript of “1+1” which the examiner has interpreted as “one plus one” which logically would be represented as a “2”. Refer to claim 1 on to Pg 1 lines 20-30 and refer to Claim 3 on Pg 3 lines 11-30 and Pg 4 lines 8-10 for more details. The examiner suggests defining the subscript as a variable which cannot be confused with the number one. Appropriate correction is required.

Referring to Claim 1 and Claim 3, The subscript 1 on Pg 1 line 1 of Claim 1 and subscript 1 on Pg 4 line 1 of Claim 3 also appears to be typing error because they represents a variable which is greater than zero and less than or equal to one. The examiner suggest defining the subscript as a variable which cannot be confused with the number one. Appropriate correction is required.

### ***Claim Objections***

6.0 Claim 3 is objected to because of the following informalities:

7.0 What is the antecedent basis for the “intermediate value” per Pg 3 line 14-Pg 4 line 7. The examiner suggest defining the antecedent value for “intermediate value”. Appropriate correction is required.

### ***Claim Objections***

**8.0** Claims 1,2,& 4 are objected to because of the following informalities:

**9.0** The “%” system has a delete mark around “percentage” per Pg 2 lines 7-9 per Pg lines 1-3, and per Pg 4 lines 18-25. The examiner recommends that the applicant delete the symbol. Appropriate correction is required.

### ***Specification***

**10.0** The disclosure is objected to because of the following informalities: The subscripts in the equations referred to in claims 1-4 appear to have a typing error because the equations refer to a subscript of “1+1” which the examiner has interpreted as “one plus one” which logically would be represented as a “2”. The error relative to the subscript appears to have also been carried over into the specification.

The subscript 1 on Pg 1 line 1 of Claim 1 and subscript 1 on Pg 4 line 1 of Claim 3 also appears to be typing error because they represents a variable which is greater than zero and less than or equal to one. This typing error has also been carried over into the specification.. Appropriate correction is required.

The “%” system has a delete mark around “percentage” per Pg 2 lines 7-9 per Pg lines 1-3, and per Pg 4 lines 18-25 of the claims has been also carried into the claims. Appropriate correction is required.

### ***Drawings***

**11.0** The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The applicant has submitted the drawings that are part of the French Patent that was cited in the International Report as prior art X reference rejections. The Figures 1-3 submitted are in French and come from the prior art document FR 2 742 613-A1 and have nothing to do with the specification. There are two figures referred to in the specification which are shown in the Foreign priority document that should have been submitted after translation into English as the drawings for this application. The figures which

have been submitted do not show any of the claim limitations; therefore, the claim limitation must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Conclusion***

**12.0** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Sueuer et. al.; French Patent No.: 2,742, 613 dated 6/20/97 was translated and examined because it was cited as an X reference in the international search report that applied to the German Patent No.; WO 00/25471 which is the foreign priority document for this patent. Sueur

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et. al. discloses a process for evaluation of the quality of a digital channel in which signal vectors are transmitted but does not disclose a process for calculation the mean modulation error.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is (703) 305-4703. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Robert W Wilson  
Examiner  
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RWW  
August 25, 2004

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DANG TON  
PRIMARY EXAMINER

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